BLUE DOLPHIN EXPLORATION CO., ET AL.

IBLA 98-228 Decided March 23, 1999

Appeal of a decision by the Associate Director for Policy and Management Improvement, Minerals Management Service, denying appellant's appeal from a decision of the Production Accountability Branch denying processing allowances taken against royalty. MMS 96-0252 O&G.

Affirmed in part, reversed in part, and remanded.

1. Federal Oil and Gas Royalty Management Act of 1982: Royalties--Oil and Gas Leases: Royalties: Generally

   The sale price received by an affiliate of the lessee in the first arm's-length transaction is properly considered in determining value for royalty purposes.

2. Federal Oil and Gas Royalty Management Act of 1982: Royalties--Oil and Gas Leases: Royalties: Generally

   Under the pre-1988 Departmental regulations, "processing" of wet gas contemplated the removal of or extraction of liquefiable hydrocarbons. Under the post-1988 regulations, removal of hydrocarbon and nonhydrocarbon substances are included within the definition of "processing" wet gas. 30 C.F.R. § 206.101 (1988); 30 C.F.R. § 206.151 (1988).

APPEARANCES: Lawrence G. McBride, Esq., Washington, D.C., for appellants; Howard Chalker, Esq., and Geoffrey Heath, Esq., for the Minerals Management Service.

OPINION BY ADMINISTRATIVE JUDGE TERRY

Blue Dolphin Exploration Company (Blue Dolphin or appellant) and its affiliate, Mission Energy, Inc. (MEI), have appealed from a November 18, 1997, decision of the Associate Director for Policy and Management Improvement (Associate Director), Minerals Management Service (MMS), affirming a May 9, 1996, order by the Production Accountability Branch (PAB), MMS, prohibiting the deduction of a processing allowance for the cost of operating MEI's vapor recovery unit (VRU) at its Buccaneer Plant, and requiring

Blue Dolphin and MEI to recalculate and pay additional royalties on product recovered by the VRU. 1/

Blue Dolphin is lessee and operator of the Galveston Block 288, a group of Federal outer continental shelf (OCS) leases governing production from a number of oil and gas wells known collectively as the Buccaneer Field. MEI operates the "Buccaneer Plant onshore Texas," where natural gas is separated from the liquid hydrocarbon stream (which contains both crude oil and condensate) piped in from the Buccaneer Field via Blue Dolphin's pipe line. (Statement of Reasons (SOR) at 7.) The Buccaneer Plant processes production not only from Blue Dolphin's Galveston Block 288, but also from 14 other OCS leases.

Production from the Buccaneer Field is piped to the onshore Buccaneer Plant in the form of a "commingled liquid and gas hydrocarbon stream" where it is initially separated via a "slug catcher" into crude oil and natural gas components. (SOR at 7.) The natural gas component is conveyed by pipeline through dehydration facilities and is delivered to the sales meter at the intake of Dow Chemical's Freeport Plant, which, during the relevant time period, was the sole purchaser of natural gas from the MEI slug catcher. Id. MEI stores the remaining liquid product stream in a tank battery before pumping it to the barge loading facility, where it is metered for royalty purposes. Id.

At the time it is piped out of the slug catcher, the liquid product stream holds crude oil, condensate, and entrained gas in varying proportions. Prior to 1993, the entrained gas remained suspended in the liquid product stream until it reached the tank battery, where the gas was vented into the atmosphere when it achieved normal atmospheric pressure. In late 1993, however, MEI installed the VRU, a system designed to capture entrained gas. The natural gas liquids (NGL's) derived from the gas in the VRU is sold to Enterprise Products Company of Houston (Enterprise) for fractionation into ethane, propane, isobutane, and natural gasoline. (SOR at 2, 8.)

The VRU consists of three sequential processes. First, the "heater-treater vessel" captures the entrained natural gas by vaporizing it as the entire liquid stream passes through. (SOR at 8.) While the liquid product continues on to the tank battery to be metered and stored, the extracted gas is piped to the "compressor-scrubber system," where either "natural gas liquids" (according to appellants) or "condensate," (according to MMS) is separated from the balance of the captured "flash" gas. 2/

1/ Specifically, the May 9, 1996, Order directed Blue Dolphin to "recalculate, report, and pay additional royalties associated with the Blue Dolphin Pipeline System (Operations System No. 1.0), Buccaneer Plant/Galveston Block 288 Agreement No. 891-008670-0 (Buccaneer Plant), from first production to the date of the Order, * * * and prospectively."

2/ The parties have a fundamental disagreement concerning whether the product shipped to Enterprise is "natural gas liquids" or "condensate." The SOR at 8 designates the captured gas as "flash gas."

From this point, the dry ("flash") gas is merged through a metered connection into the BD-Dow gas line, while the liquid product is piped to a pressurized storage tank, where it awaits truck delivery to Enterprise. It is the royalty from this remaining liquid production that is in dispute.

On January 3, 1994, Ivory Production, Blue Dolphin's predecessor, submitted a request for waiver of royalty due on gas from the VRU, stating that "MEI's primary purpose for installing this equipment was compliance with the Environmental Protection Agency's new rules requiring facilities such as MEI's to emit no vapors to the atmosphere," and that "the capital and operating costs of this equipment will most probably exceed the revenue received." On March 4, 1994, MMS denied Ivory's request for complete waiver of royalty, and required allocation of VRU production to each well. On April 20, 1994, however, MMS modified its earlier order by permitting all royalty obligation for VRU production to be allocated to Ivory. (MMS Field Report, Attachments E, F, and G.)

On May 9, 1996, the PAB, MMS, reviewed Ivory's royalty reporting procedures with reference to VRU production, and determined:

> Upon review of the schematics prepared by MEI Energy, Inc., for the referenced property, PAB determined that Ivory is incorrectly reporting the production and royalties on the referenced property and erroneously claiming manufacturing allowances. Based on Federal Regulations at 30 CFR § 206.151 (1995), * * * we determined that the process utilized in this facility does not separate the liquids from the gas using either adsorption, absorption, or refrigeration. Therefore, the Buccaneer Plant is viewed as a separation facility, not a gas processing plant and does not qualify for a processing allowance. Gas produced from this facility should be reported as unprocessed gas, rather than residue gas, and the liquids recovered from the VRU should be reported as scrubber condensate not Natural Gas Liquids.

(PAB Order to Comply at 1-2.)

Blue Dolphin appealed to the Appeals Division on two grounds. First, Blue Dolphin charged that MMS' Order to Comply erroneously characterized the VRU portion of the Buccaneer Plant as a separation, rather than as a processing facility, and argued that the VRU in fact generates "processed gas" within the definition of "processing" found at 30 C.F.R. § 206.151. Appellant argued that the VRU is essentially a "gas plant" from which dry gas and NGL's are extracted from wet gas, and that the fact that "NGL's" are of a "raw make" when they are sold to Enterprise is not determinative of whether they have been "processed" as that term is defined by regulation. (Response to Field Report at 3 at 3-5.) Secondly, Blue Dolphin maintained that, because MEI, and not Blue Dolphin, is responsible for sale of the "VRU-recovered gas," and because MEI has arm's-length transactions with third party purchasers for the sale of this gas, neither MEI nor Blue Dolphin bears royalty obligation for the VRU product.

In his November 1997 Decision, the Associate Director held that VRU production is royalty bearing pursuant to 30 C.F.R. § 202.150(b)(1) and pursuant to the applicable lease agreements. Secondly, he held that, pursuant to the definition of "processing" found at 30 C.F.R. § 206.151, 3/ the salient factor to be examined in determining whether operations qualify for a processing allowance is "the function of the equipment utilized in the facility." (Decision at 2-3.)

The Associate Director examined the function of the VRU equipment, stating:

> The first part of the VRU, the heater treater, does not qualify as processing. This component separates gaseous products from a stream of liquids by heating the liquids. By definition, therefore, it is not a "process designed to remove elements or compounds * * * from gas. * * *." * * * In any event, the heating process is not one that would qualify for an allowance.
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> The equipment found in the three-stage compressor/scrubber system is considered field processing equipment. The main function of this equipment is compression and mechanical separation. The condensate recovered is a result of initially raising the pressure of the gas stream by use of the three-stage compressor and then decreasing the pressure and mechanically separating the condensate from the gas stream by use of the separator vessels.

(Decision at 3.) The Associate Director therefore upheld PAB's Order of Compliance.

Appellant raises the same issues in its SOR before this Board that it raised before the Associate Director: (1) whether VRU product is subject to royalty at all, and, if so, (2) whether the products generated by the VRU are in fact "processed" as that term has been defined by 43 C.F.R. § 206.151.

The Secretary of the Interior is authorized to lease land on the OCS under the Outer Continental Shelf Lands Act (OCSLA), as amended, 43 U.S.C. § 1337 (1994), for the exploration and development of mineral resources, including oil and gas. The provisions of OCSLA, 43 U.S.C. §§ 1331-1356 (1994), and leases issued pursuant to that Act, require payment of royalties equal to a specified percentage of the amount or value of the oil and gas produced. When it passed this Act, Congress committed the Government to the goal of obtaining fair market value for offshore oil and gas resources. Watt v. Energy Action Educational Foundation, 454 U.S. 151, 162 (1981); Conoco Inc., 110 IBLA 232, 239 (1989); Sun Exploration & Production Co., 104 IBLA 178, 184 (1988); Amoco Production Co., 78 IBLA

3/ In its Decision at 2, MMS cites the applicable regulation as 30 C.F.R. § 206.152 (1996). The material quoted, however, is found at 30 C.F.R. § 206.151. See Decision at 4.

93 (1983), aff'd, Amoco Production Co. v. Hodel, 627 F. Supp. 1375 (W.D. La. 1986), vacated and remanded, 815 F.2d 352 (5th Cir. 1987), cert. denied, 108 S. Ct. 2898 (1988).

The Secretary has considerable discretion in determining the value of production for royalty purposes. Marathon Oil Co. v. United States, 604 F. Supp. 1375, 1382 (D. Alaska 1985), aff'd, 807 F.2d 759 (9th Cir. 1986), cert. denied, 107 S. Ct. 1593 (1987); Conoco Inc., supra at 240; Texaco, Inc., 104 IBLA 304, 308 (1988); Amoco Production Co., supra at 96. That discretion is tempered only by the standard of reasonableness. Conoco Inc., supra; Texaco Inc., supra at 310. The party challenging a royalty valuation by MMS has the burden of showing that the method of calculation is in error. TXP Operating Co., 115 IBLA 195, 204 (1990); Walter Oil & Gas Corp., 111 IBLA 260, 266 (1989); Mobil Oil Corp., 108 IBLA 216 (1989); Amoco Production Co., 85 IBLA 121 (1985); Amoco Production Co., 78 IBLA at 95.

[1] Blue Dolphin argues that VRU production is not subject to royalty because MEI is not a lessee, nor has it made payments for VRU product capture to any lessees. Thus, according to appellants, because no lessee has received value for the production, no royalty is due. Appellants admit, however, that MEI is a "sibling company," or affiliate, of Blue Dolphin Exploration Company, which holds the Galveston Block 288. Both companies are owned by Blue Dolphin Energy Company, as is Blue Dolphin Pipeline Company, which provides pipeline transportation for itself and other producers in the OCS and Texas waters area. (SOR at 2-3.)

OCSLA provides that the Department obtains royalties based on the "amount or value of the production saved, removed, or sold." 43 U.S.C. § 1337(a)(1)(A, B) (1994). Consistent with OCSLA, departmental regulations found at 30 C.F.R. §§ 202.100(b)(1) (1995) and 202.150 (b)(1) (1995) 4/ provide that "all gas [or oil] produced from a Federal or Indian lease is subject to royalty." Standards for valuing production of oil and gas for royalty purposes from Federal leases are found at 30 C.F.R. § 206.102 (oil) and 30 C.F.R. § 206.152 (gas). Those regulations provide that, in the case of arm's-length sales, the value of production shall generally be the "gross proceeds" accruing to the lessee. Lessees bear the burden of establishing that sales are at arm's length. 30 C.F.R. § 206.102((b)(1)(i) (oil); 30 C.F.R. § 206.152(b)(1)(i) (unprocessed gas) and 30 C.F.R. § 206.153(b)(1)(i) (processed gas). For nonarm's-length transactions, production is valued at "MMS benchmarks," found at 30 C.F.R. § 206.102(c) (oil) and § 206.152(c) (unprocessed gas) and § 206.153(c) (processed gas), and then compared to the "gross proceeds accruing from the sale of the separated products." (Answer at 4.)

This Board has held that the sale price received by an affiliate of the lessee in the first arm's-length transaction is properly considered in determining value for royalty purposes. Xeno, Inc., 134 IBLA 172, 179

4/ All citations of Departmental regulations refer to the 1995 regulations in effect at the time of the audit, unless otherwise noted.

(1995); Shell Oil Co. (On Reconsideration), 132 IBLA 354 (1995), overruling, Shell Oil Co., 130 IBLA 93 (1994); see Santa Fe Energy Products, Co., 127 IBLA 265 (1993), aff'd, Santa Fe Energy Products v. McCutcheon, 90 F.3d 409 (10th Cir. 1996). For purposes of sale of the liquid product captured from the VRU, the first arm's-length sale that occurs is that which occurs between Enterprise and MEI, notwithstanding the fact that all lessees, including Blue Dolphin Exploration Company, may have contractually ceded their authority to collect compensation for VRU liquid products to MEI. Appellants have not established that the value of liquid product captured from the VRU is appropriately "0." Since MEI received a price for the product, the material has value, and is properly determined to be royalty-bearing. That portion of the MMS Order is affirmed.

[2] We next turn to the question of whether appellants should be granted a processing allowance for production recovered from the VRU. The resolution of this question is grounded in two well-settled principles found in Federal oil and gas royalty law. The first is the concept of the duty to market; the second pertains to the distinction that has been made in the law between "unprocessed" and "processed gas." Under the pre-1988 Departmental regulations, "processing" of wet gas contemplated the removal of or extraction of liquefiable hydrocarbons. Under the post-1988 regulations, removal of hydrocarbon and nonhydrocarbon substances are included within the definition of "processing" wet gas. 30 C.F.R. § 206.101 (1988); 30 C.F.R. § 206.151 (1988); see Exxon Company, U.S.A., 121 IBLA 232, 243-244, 98 I.D. 409, 414 (1991).

We have often stated: "The lessee is required to place gas in marketable condition at no cost to the Federal Government or Indian lessor unless otherwise provided in the lease agreement." Anson Co., 145 IBLA 221, 225 (1998). See Bailey D. Gothard, 144 IBLA 17 (1998); TXP Operating Co., supra at 202-03; Amoco Production Co., 112 IBLA 77, 87 (1989); The Tax Co., 64 I.D. 76, 79 (1957). See also Mesa Operating Ltd. v. U.S. Department of the Interior, 931 F.2d 318 (5th Cir. 1991); California Co. v. Udall, 296 F.2d 384, 388 (D.C. Cir. 1961). "Marketable condition" means the "lease products are sufficiently free from impurities and otherwise in a condition that they will be accepted by a purchaser under a sales contract typical for the field or area." 30 C.F.R. § 206.101. In California Co. v. Udall, the court, in discussing the lessee's duty to market, stated:

> The premise for the Secretary's decision in the case before us was that, since the lessee was obligated to market the product, he was obliged to put it in marketable condition; and that the "production" was the product in marketable condition. * * * There is a clear distinction between "marketing" and merely selling. For the former there must be a market, an established demand for an identified product.

California Co. v. Udall, supra at 387, 388 (footnote omitted). In this case, however, these liquid hydrocarbons were marketed without further processing prior to installation of the VRU. See SOR at 32-33.

Appellants argue that the operations in question are properly categorized as "processing," pursuant to 30 C.F.R. § 206.151, and, therefore, an allowance should be granted. That regulation states, in pertinent part:

> Processing means any process designed to remove elements or compounds (hydrocarbon and nonhydrocarbon) from gas, including absorption, adsorption, or refrigeration. Field processes which normally take place on or near the lease, such as natural pressure reduction, mechanical separation, heating, cooling, dehydration, and compression, are not considered processing. The changing of pressures and/or temperatures in a reservoir is not considered processing.

MMS takes the position that the product has not been processed, because the operations performed by the VRU do not break down the product into constituent parts by means other than "natural pressure reduction, mechanical separation, heating, cooling, dehydration, and compression," and because the product must undergo further refinement before it is broken down into its various hydrocarbon constituents. The product, according to MMS, has not reached the level of refinement necessary for classification as "natural gas liquids," or "gas plant products," permitting a "processing allowance" pursuant to 30 C.F.R. § 206.158, but is properly classified as "condensate," or more specifically, "scrubber condensate," subjecting it to valuation pursuant to 30 C.F.R. § 206.152, pertaining to "unprocessed gas."

According to appellants, however, the definition of "processing" permits the creation of "raw make" NGL's in just this fashion. Appellants argue that the liquids captured in the VRU are intermediate products: they are basically "natural gas liquids" extracted from "wet gas" to create "dry" or "residue" gas. "Both steps," according to appellants, "[i.e.] taking `wet gas' and extracting the NGL's to leave a `dry,' `residue,' largely-methane gas stream; and * * * fractionating the NGL's into separately marketable products--are processing under the MMS rules." (Reply to Answer at 14.) Appellants challenge MMS' denial of a processing allowance based upon the Preamble to the 1988 revision of gas royalty valuation regulations, and the Board's decision in Union Oil Co. of California, 116 IBLA 8, 13 n.5 (1990).

Prior to examining pertinent regulations and case law, however, a closer look at what happens in the VRU is instructive. Vernon R. Luning, Vice-President of Operations for MEI and Blue Dolphin, avers the following:

> 3. One of the process additions to the Buccaneer Plant, with which I was directly involved, was the addition of the VRU in August, 1993. * * *
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> * * * * * * *
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> 5. The VRU has never produced any "condensate", using that definition of "condensate" found at 30 CFR 206.151, nor has MEI recovered or sold any condensate since the VRU was installed.

> The product of the initial (heater-treater) vessel of the VRU is a natural gas stream that is not liquid at one atmosphere. Prior to installation of the VRU, natural gas escaped from MEI's liquid hydrocarbons as they were held in storage tanks at one atmosphere pressure, and vented in gaseous form to the atmosphere.
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> 6. The second treatment, which is the compression phase of the VRU, yields two distinct products: a methane gas stream transported to and metered into the Blue Dolphin-Dow gas line; and a volume of NGLs that still require (but are susceptible of) fractionation, that goes to the pressurized natural gas liquids storage tank installed and operated as part of the VRU.
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> 7. * * * Since installation of the VRU, all NGL's from the VRU have been delivered to Enterprise under arm's length contract between MEI and Enterprise for fractionation at Enterprise's plan into natural gas plant products, * * *.
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> 8. The average heating value of the Blue Dolphin-Dow gas line leaving the slug catcher ranges from 1050 to 1070 BTU [British thermal units]/cu.ft. The average heating value of the natural gas stream from the initial (heater treater) vessel of the VRU ranges from 1550 to 1600 BTU/cu.ft. After processing to remove the NGLs from that gas stream, its average heating value (as metered before entry into the MEI-DOW gas line) ranges from 1300 to 1350 BTU/cu.ft. In my experience, any natural gas stream with a BTU value greater than 1100 BTU/cu.ft. is considered processable.

(Affidavit of Vernon R. Luning, SOR, Attachment 1.)

According to MMS, however, "the gas is not processed because all of the equipment at Buccaneer is for mechanical separation, heating, cooling, and compression," which are excluded from the regulatory definition of processing:

> A review of the Buccaneer schematic demonstrates that the gas is not processed. There is no absorption, adsorption or refrigeration or other similar processes employed at Buccaneer. Rather, this schematic shows that the VRU employs mechanical separation, heating, cooling and compression.
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> Beginning with [the] Heater Treater (TR-1000 on the Buccaneer schematic), crude oil and entrained gas is mechanically separated into crude oil and gas. The crude oil goes into oil storage tanks and is sold.
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> The gas goes into the Vapor Recovery Compressor (C-1000 on the Buccaneer schematic). The VRU compresses the gas up to 400 psi and forces it into a Discharge Separator (V-1002 on the Buccaneer schematic) which operates at 400 psi and 100 degrees

> fahrenheit. The Discharge Separator mechanically separates the gas from condensate. From the Discharge Separator, gas is returned to an Inlet Separator (V-1000 on the Buccaneer schematic) and Gas Contactor (D-1000 on the Buccaneer schematic) for treatment. Then the gas is sold.
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> The condensate is warmed (heating) to 110 degrees fahrenheit in the Heat Exchanger (E-1001 on the Buccaneer schematic) and mechanically separated again in the NGL Flash Separator (V-1000 on the Buccaneer schematic) which operates at 300 psi and 100 degrees fahrenheit. Flash gas from the NGL Flash Separator (V-1001 on the Buccaneer schematic) is recycled back to the Vapor Recovery Compressor (C-1000 on the Buccaneer schematic) for compressor inlet suction pressure maintenance. A part of the flash gas is sold after flashing again in the discharge separator. The remaining flash gas is recycled again through the VRU.
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> The condensate leaving the NGL Flash Separator (V-1001 on the Buccaneer schematic) is stored in the NGL Product Storage tank (V-1003 on the Buccaneer schematic) before it is transported to the Enterprise fractionation plant.

(MMS Answer at 6-8.)

MMS does not consider the Btu content of the gas at the time it leaves the VRU to be proof that the gas stream has been "processed." MMS interprets the Luning Affidavit in the following way:

> Blue Dolphin states in its Luning Affidavit, paragraph 8, after "processing" to remove the NGLs from the gas stream, "its average heating value ranges from 1300 to 1350 BTU/cu.ft." However, after gas passes through a processing plant, the BTU content is usually about 1000 BTU per cubic foot. There is a lower BTU content after processing because processing removes most of the liquid hydrocarbons heavier than ethane. However, as Blue Dolphin states, the average heating value of the gas flashing of[f] the NGL flash tanks at Buccaneer "ranges from 1300 to 1350 BTU/cu.ft." This relatively high heating value indicates that a lot of entrained liquids remain in the gas. The entrained liquids remain in the gas because the VRU is simply a mechanical separator that is unable to remove the amount of liquids that can be removed by processing. This is another indication that MMS correctly concluded that the gas is not processed in the VRU.

(MMS Answer at 9.) 5/

5/ On reply, appellants do not challenge MMS' characterization of the methods by which the liquids are separated from the flash gas in the VRU, nor do they challenge MMS' explanation of the Btu content of the product leaving the VRU.

From the information provided to us by the parties, we conclude that the liquid product captured by the VRU has been "processed" and is not "condensate" as that term is defined at 30 C.F.R. § 206.151. The product of the initial (heater-treater) vessel of the VRU is a natural gas stream that is not liquid (condensate) at one atmosphere. The second treatment, which is the compression phase of the VRU, yields two distinct products: a methane gas stream transported to and metered into the Blue Dolphin-Dow gas line; and a volume of NGLs that still require (but are susceptible of) fractionation, that go to the pressurized NGL's storage tank installed and operated as part of the VRU. All NGL's from the VRU are delivered to Enterprise under arm's-length contract between MEI and Enterprise for fractionation at Enterprise's plant into natural gas plant products.

As we observed in Exxon Company, U.S.A., supra, where an element of a gas stream is "processed into a gas plant product" and sold, a processing deduction would apply. Id. at 245, 98 I.D. at 414. Although Exxon Company, U.S.A., supra, was decided under the pre-1988 regulations, the regulatory changes do not moot the Board's recognition that "processing" includes the removal or extraction of NGL's from wet gas and is properly distinguished from separation of gas from produced crude, condensate, or water which is not entitled to an allowance. See id. at 243-44, 98 I.D. at 414. While we acknowledge that no allowance is available for the costs of treatment necessary to place production in marketable condition, the record reflects that the liquid hydrocarbon products are marketable once separated from the natural gas at the slug catcher. As noted above, these NGL's were marketed without further processing prior to installation of the VRU.

For these reasons, we find the recovery of NGL's under pressure in the VRU constitutes part of the processing of the wet gas into liquids and natural gas, for which an allowance for the cost of manufacture is proper. We further determine the processing allowance is not only for fractionation expenses, which MMS concedes, but also for the costs of extraction and recovery of NGL's from the gas stream that occurs at the VRU.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the decision appealed from is affirmed in part as it relates to the determination that recovery of NGL's from the gas stream at the VRU are royalty bearing, reversed as to the determination that extraction and recovery costs are not allowable processing deductions, and the case is remanded to MMS for recomputation of royalty consistent with this decision.

James P. Terry
Administrative Judge

I concur:

C. Randall Grant, Jr.
Administrative Judge